WHAT IS CLAIMED IS:

1.   An image processing system comprising:

an image data transmission terminal;

5   an image formation apparatus;

a filtering section for performing filtering for image

data;

a coding section for performing reversible coding

processing for the image data subjected to the filtering by

10   the filtering section; and

a decompression section for performing decompression

processing for the image data subjected to the coding processing

by the coding section, wherein

the filtering of the filtering section changes the pixel

15   value of image data so as to be fitted for the coding processing

of the coding section.

2.   An image processing system comprising:

an image data transmission terminal; and

20   an image formation apparatus, wherein

the image data transmission terminal includes:

a filtering section for performing filtering for

image data;

a coding section for performing reversible coding

25   processing for the image data subjected to the filtering by

the filtering section; and

a transmission section for transmitting the image data subjected to the coding processing by the coding section to the image formation apparatus, and wherein

5   the image formation apparatus includes:

a reception section for receiving the image data from the image data transmission terminal; and

a decompression section for performing decompression processing for the image data received by the

10   reception section, and wherein

the filtering of the filtering section changes the pixel value of image data so as to be fitted for the coding processing of the coding section.

15   3.   An image processing system comprising:

an image data transmission terminal; and

an image formation apparatus, wherein

the image data transmission terminal includes:

a filtering section for performing filtering for

20   image data; and

a transmission section for transmitting the image data subjected to the filtering by the filtering section to the image formation apparatus, and wherein

the image formation apparatus includes:

25   a reception section for receiving the image data

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from the image data transmission terminal;

a coding section for performing reversible coding
processing for the image data received by the reception section;
and

5   a decompression section for performing
decompression processing for the image data subjected to the
coding processing by the coding section, and wherein

the filtering of the filtering section changes the pixel
value of image data so as to be fitted for the coding processing
10   of the coding section.

4.   The image processing system according to claim 1,
wherein

the filtering section performs filtering corresponding
15   to an algorithm of the coding processing of the coding section.

5.   The image processing system according to claim 4,
further comprising:

an edit section for performing edit processing for the
20   image data decompressed by the decompression section;

a re-coding section for performing coding processing for
the image data subjected to the edit processing;

a re-decompression section for performing decompression
processing for the image data subjected to the coding processing
25   by the re-coding section; and

an image formation section for forming an image based on the image data decompressed by the re-decompression section.

6. The image processing system according to claim 1, wherein

to perform coding processing for an attention pixel unit in the image data, the coding section references the pixel value of a pixel unit at a preset position and performs coding processing.

7. The image processing system according to claim 6, wherein

as the filtering, the filtering section changes the pixel value of the attention pixel unit so as to raise the probability that the pixel value of the attention pixel unit will match the pixel value of the pixel unit at the preset position.

8. The image processing system according to claim 1, wherein

the filtering section changes the pixel value of the attention pixel unit in response to the spatial frequency of the image data.

9. The image processing system according to claim 1, wherein

as the filtering, the filtering section changes the pixel

value of the attention pixel unit in the image data so as to

decrease the code amount of coding of the coding section and

distributes the change amount produced by changing the pixel

5   value to peripheral pixels, and wherein

the coding section codes the pixel value changed by the

filtering.

10.   The image processing system according to claim 1,

10   further comprising:

a parameter generation section for generating a filter

parameter in response to a specified compression ratio, wherein

the filtering section performs the filtering in response

to the generated filter parameter.

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11.   The image processing system according tto claim

10, wherein

the parameter generation section generates the filter

parameter in response to the speed at which data can be

20   transferred to the image formation apparatus or the operation

state of the image formation apparatus.

12.   The image processing system according to claim 2,

wherein

25   the image formation apparatus further includes a

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re-filtering section for performing the filtering for the image data subjected to the edit processing by the edit section in response to the type of edit processing or the operation state of the image formation apparatus.

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13.   An image formation apparatus comprising:

a reception section for receiving image data subjected to filtering;

a coding section for performing reversible coding

10   processing for the image data received by the reception section;

a decompression section for performing decompression processing for the image data subjected to the coding processing by the coding section;

an edit section for performing edit processing for the

15   decompressed image data;

a re-coding section for performing reversible coding processing for the image data subjected to the edit processing;

a re-decompression section for performing decompression processing for the image data subjected to the coding processing

20   by the re-coding section; and

an image formation section for forming an image based on the image data decompressed by the re-decompression section.

14.   An image formation apparatus comprising:

25   a reception section for receiving image data subjected

to filtering and reversible coding processing;

a decompression section for performing decompression processing for the image data received by the reception section;

an edit section for performing edit processing for the decompressed image data;

a re-coding section for performing reversible coding processing for the image data subjected to the edit processing;

a re-decompression section for performing decompression processing for the image data subjected to the coding processing by the re-coding section; and

an image formation section for forming an image based on the image data decompressed by the re-decompression section.

15. An image formation apparatus comprising:

an filtering section for performing filtering for image data;

a coding section for performing reversible coding processing for the image data subjected to the filtering by the filtering section;

a decompression section for performing decompression processing for the image data subjected to the coding processing by the coding section;

an edit section for performing edit processing for the decompressed image data;

a re-coding section for performing reversible coding

processing for the image data subjected to the edit processing;

a re-decompression section for performing decompression processing for the image data subjected to the coding processing by the re-coding section; and

5   an image formation section for forming an image based on the image data decompressed by the re-decompression section.

16.   An image processing method for repeating coding processing and decompression processing of image data, the

10   method comprising:

performing filtering of changing the pixel value so as to fit for reversible coding processing for image data;

performing reversible coding processing for the image data subjected to the filtering; and

15   performing decompression processing for the image data subjected to the coding processing.

17.   A program executable by a computer for an image processing system including an image data transmission terminal

20   having the computer, and an image formation apparatus, the program comprising:

performing filtering of changing the pixel value so as to fit for reversible coding processing for image data; and

transmitting the image data subjected to the filtering

25   to the image formation apparatus.

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18.	A program executable by a computer for an image
processing system including an image data transmission terminal
having the computer, and an image formation apparatus, the
5	program comprising:

performing filtering of changing the pixel value so as
to fit for reversible coding processing for image data;

performing reversible coding processing for the image
data subjected to the filtering; and

10	transmitting the image data subjected to the coding
processing to the image formation apparatus.